	Application No.	Applicant(s)	
Notice of Allowability	Application No.		
	10/663,663 Examiner	SHIMA ET AL.	
	Stephen Yam	2878	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with the c (OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to 3 and MPEP 1308.	plication. If not include n will be mailed in due o	d course. THIS
1. This communication is responsive to <u>amendment filed Dec</u>	<u>cember 27, 2005</u> .		
2. ⊠ The allowed claim(s) is/are <u>1-18</u> .			
 Acknowledgment is made of a claim for foreign priority unally All b) Some* c) None of the: None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have The copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the priority documents have Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. Applicant has THREE MONTH PERIOD IS NOT EXTENDABLE. 	e been received. e been received in Application No cuments have been received in this of this communication to file a reply	national stage applicat	
 A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv 			OTICE OF
 CORRECTED DRAWINGS (as "replacement sheets") musical including changes required by the Notice of Draftspers hereto or 2) to Paper No./Mail Date including changes required by the attached Examiner Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the such as the state of the such as the same of the sa	son's Patent Drawing Review(PTO 's Amendment / Comment or in the (1.84(c)) should be written on the drawi	Office action of ngs in the front (not the	back) of
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT			lote the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal F 6. ☐ Interview Summary Paper No./Mail Da 7. ☐ Examiner's Amend 8. ☑ Examiner's Statem 9. ☐ Other	r (PTO-413), tte ment/Comment	
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REASONS FOR ALLOWANCE

1. Claims 1-18 are allowed over the prior art of record.

2. The following is an examiner's statement of reasons for allowance:

Regarding Claim 1, the invention as claimed, specifically in combination with a first conductivity first non-single crystalline semiconductor layer, a second conductivity second non-single crystalline semiconductor layer, a substantially intrinsic third non-single crystalline semiconductor layer between the first and second semiconductor layers, wherein many of crystal grains contained in the third semiconductor layer have major axes substantially perpendicular to said main surface of the substrate on an interfacial portion between the third semiconductor layer and the first and/or second semiconductor layer, with many of crystal grains contained in either the first or second semiconductor layer having major axes substantially parallel to the main surface of the substrate on the interfacial portion, is not disclosed or made obvious by the prior art of record.

Regarding Claim 9, the invention as claimed, specifically in combination with a first conductivity first non-single crystalline semiconductor layer, a second conductivity second non-single crystalline semiconductor layer, a substantially intrinsic third non-single crystalline semiconductor layer between the first and second layers, with the first and/or second semiconductor layers having a structure formed by stacking a first layer and a second layer with many of crystal grains in the first layer having major axes substantially parallel to the main surface of the substrate and many of crystal grains in the second layer having major axes

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substantially perpendicular to the main surface of the substrate, is not disclosed or made obvious by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571)272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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